

PRODUCT DATA SHEET

Sikament® RB 821 IA

(formerly MasterRheobuild® 821IA)

Water reducing, set retarding, superplasticiser for pavement concretes (PQC) & flat works

DESCRIPTION

Sikament® RB 821 IA is composed of synthetic polymers specially designed for producing more uniform and predictable quality pavement concrete. Placing and finishing requirements are facilitated because this admixture retards setting time. Sikament® RB 821 IA is chloride free.

USES

- Pavement Quality concrete
- All flat works
- Low slump concrete mixes
- Long hauls
- Concrete containing Slag/ Pozzolans
- Hot weather concreting

CHARACTERISTICS / ADVANTAGES

- Increased compressive and flexural strengths
- Improved workability using less water
- Reduced Segregation
- Superior finishing characteristics
- Helps eliminate cold joints
- Improved texturing characteristics
- Greater edge stability and slump control
- Flexibility in scheduling of placing and finishing operations
- Offsets effects of too early stiffening during extended delays between mixing and placing
- Reduced thermal peaks
- Reduced permeability
- Relative durability to damage from freezing and thawing

APPROVALS / STANDARDS

IS 9103, ASTM C-494 Type A, D and G, EN 934-2: T11.1/11.2

PRODUCT INFORMATION

Packaging	275kg
Shelf life	12 months from date of production if stored properly in undamaged unopened, original sealed packaging.
Storage conditions	Sikament® RB 821 IA must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult your local Sika representative.
Appearance / Colour	Dark brown free flowing liquid

Density 1.21 ± 0.02 at 25°C

pH-value ≥ 6

APPLICATION INFORMATION

Recommended Dosage

Optimum dosage of Sikament® RB 821 IA should be determined with trial mixes. As a guide, a dosage range of 500ml to 1500ml per 100kg of cementitious material is recommended. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local Sika representative.

For addition information on Sikament® RB 821 IA admixture or on its use in developing concrete mixes with special performance characteristics, contact your local Sika representative.

Dispensing

Sikament® RB 821 IA is a ready-to-use liquid which is dispensed into the concrete together with the mixing water.

The plasticising effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added. The addition of Sikament® RB 821 IA to dry aggregate or cement is not recommended.

Compatibility

Sikament® RB 821 IA is compatible with all cements and most air entraining agents meeting the ASTM C260 standards.

Sikament® RB 821 IA is also compatible with slag and pozzolans such as fly ash and silica fume.

Additions of Sikament® RB 821 IA and Sika Aer (air entraining agent) to concrete are recommended where it is required to withstand freezing and thawing cycles.

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

CORROSIVITY – NON CORROSIVE

Sikament® RB 821 IA admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressed concrete or concrete placed on galvanized steel floor and roof systems. Neither calcium chloride nor any calcium chloride-based ingredients are used in the manufacture of Sikament® RB 821 IA admixture. In all concrete application, Sikament® RB 821 IA admixture will conform to the most stringent or minimum chloride ion limits currently suggested by construction industry standards and practices.

WORKABILITY

Sikament® RB 821 IA ensures that rheoplastic concrete remains workable in excess of 2 hours at +25°C.

The polymeric system in Sikament® RB 821 IA enables controlled air entrainment which is not detrimental to strength but enhances the rheological properties to facilitate easy transportation and placing.

Workability loss is dependent on temperature, and on the type of cement, the nature of aggregates, the method of transport and initial workability.

It is strongly recommended that concrete should be properly cured particularly in hot, windy and dry cli-

mates.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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